STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

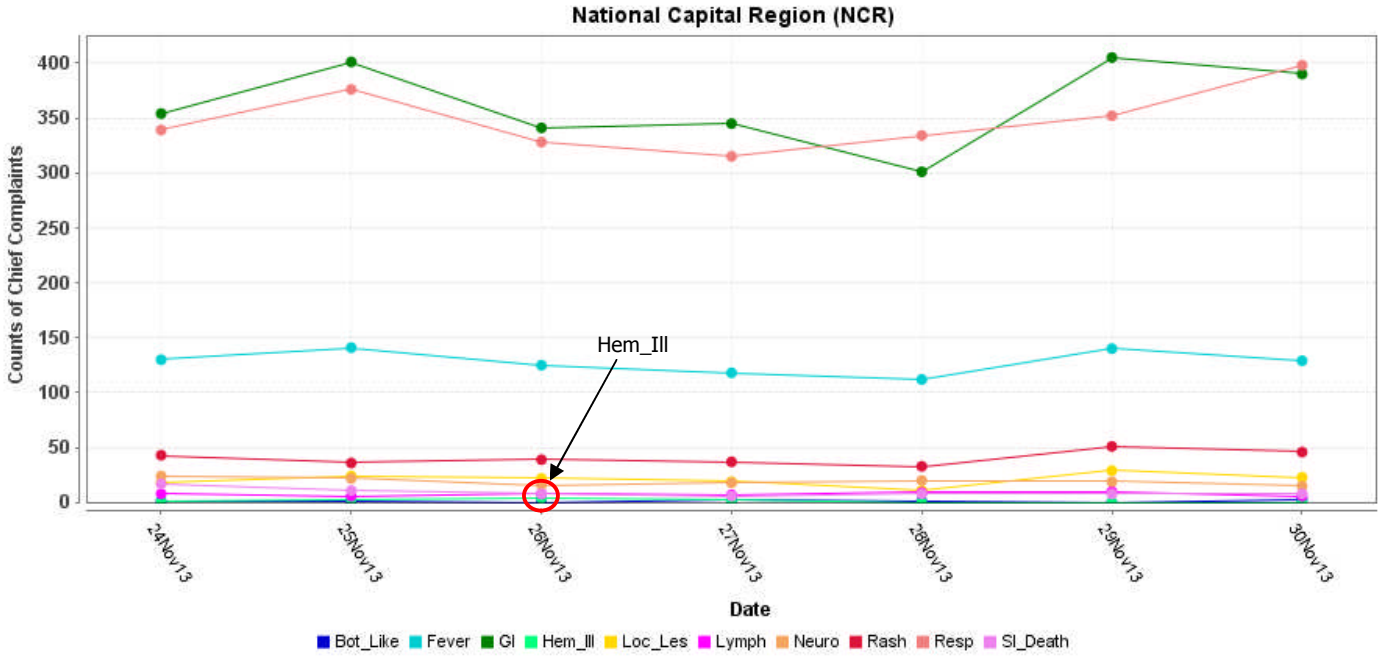
December 6, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:48
Reporting for the week ending 11/30/13 (MMWR Week #48)

CURRENT HOMELAND SECURITY THREAT LEVELS

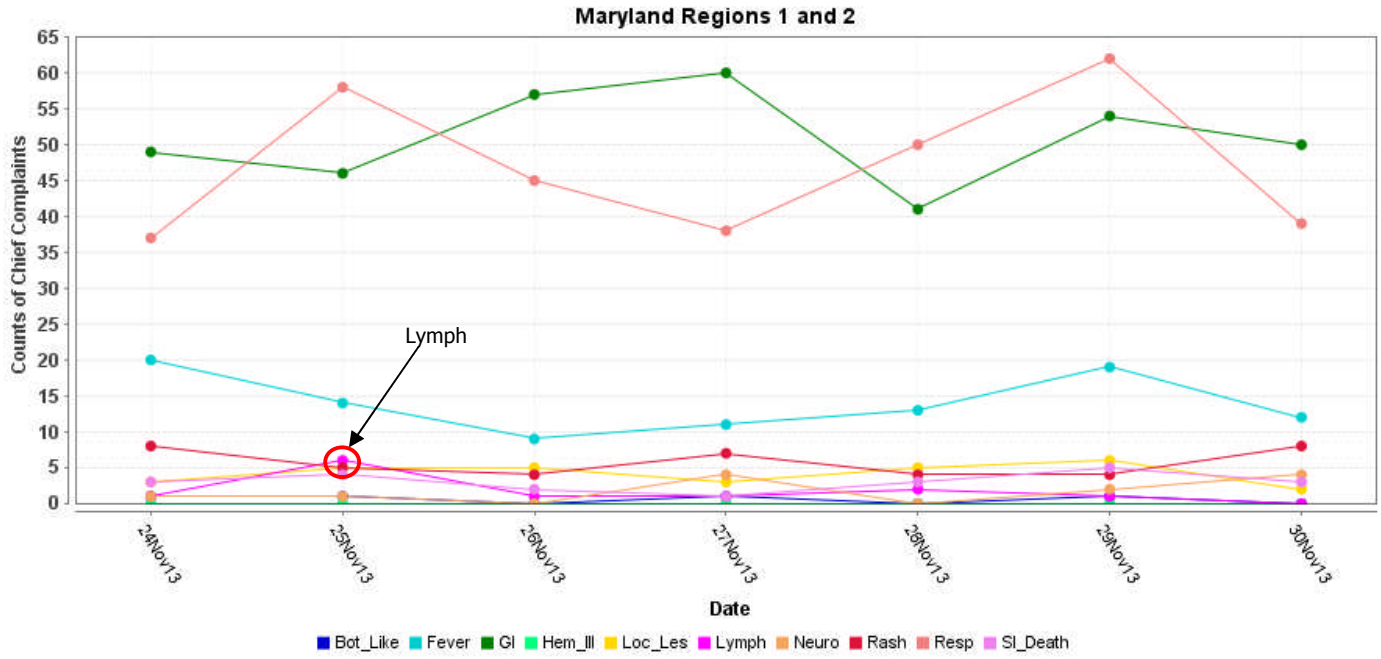
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

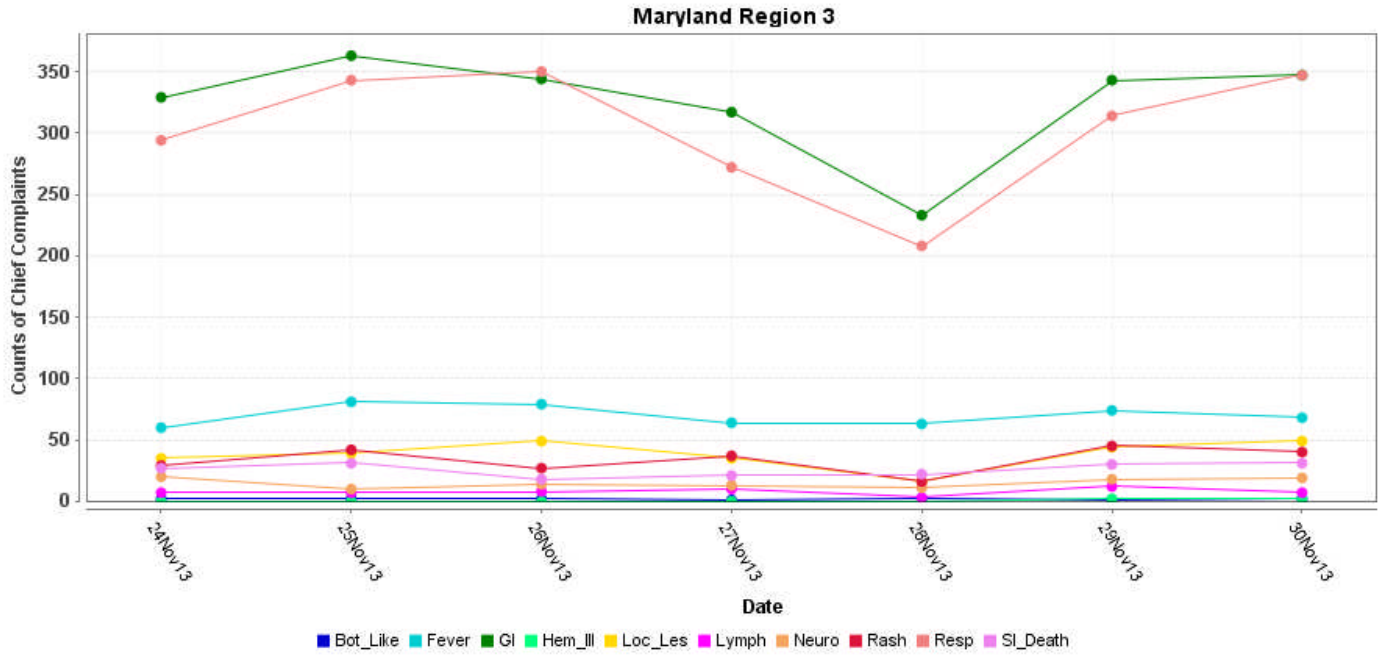


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

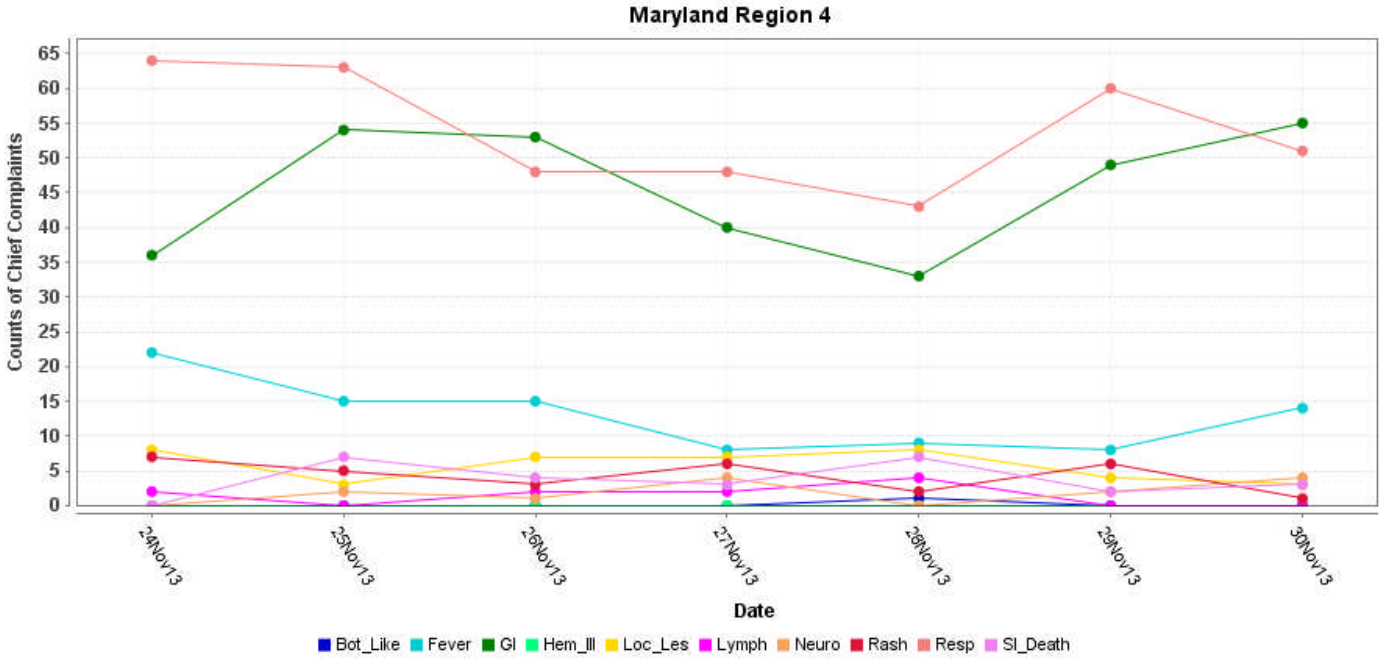
MARYLAND ESSENCE:



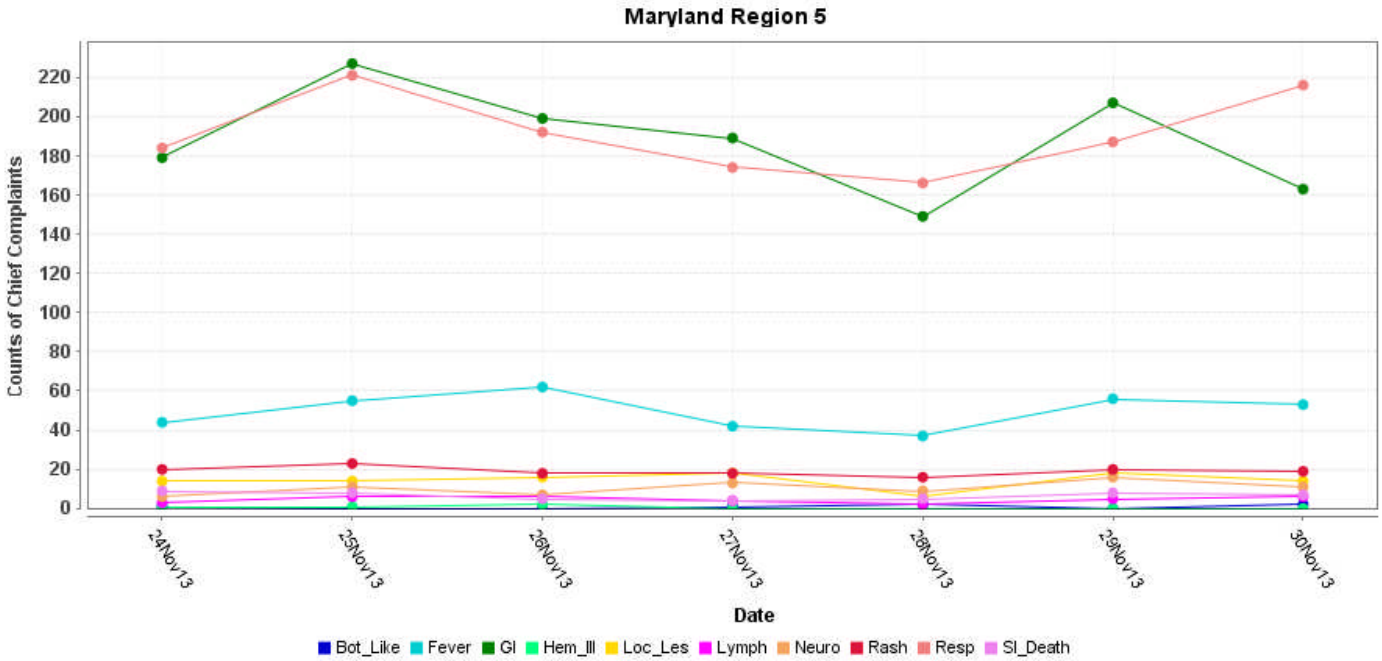
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



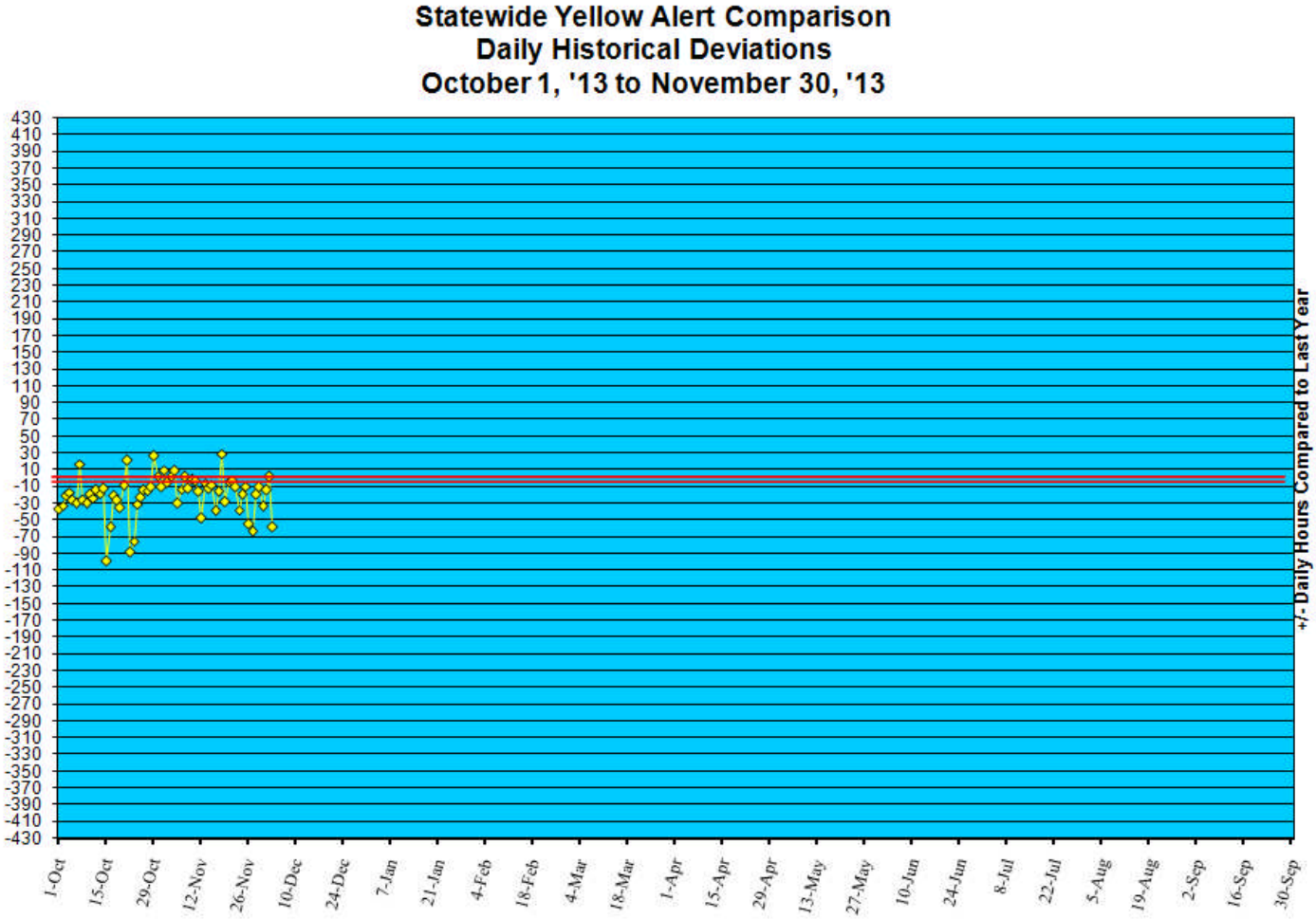
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (November 24 - November 30, 2013):	5	0
Prior week (November 17 - November 23, 2013):	4	0
Week#48, 2012 (November 26 – December 2, 2012):	13	0

2 outbreaks were reported to DHMH during MMWR Week 48 (November 24 - November 30, 2013)

1 Gastroenteritis Outbreak
1 outbreak of GASTROENTERITIS in an Assisted Living Facility

1 Respiratory Illness Outbreak
1 outbreak of INFLUENZA in a Nursing Home

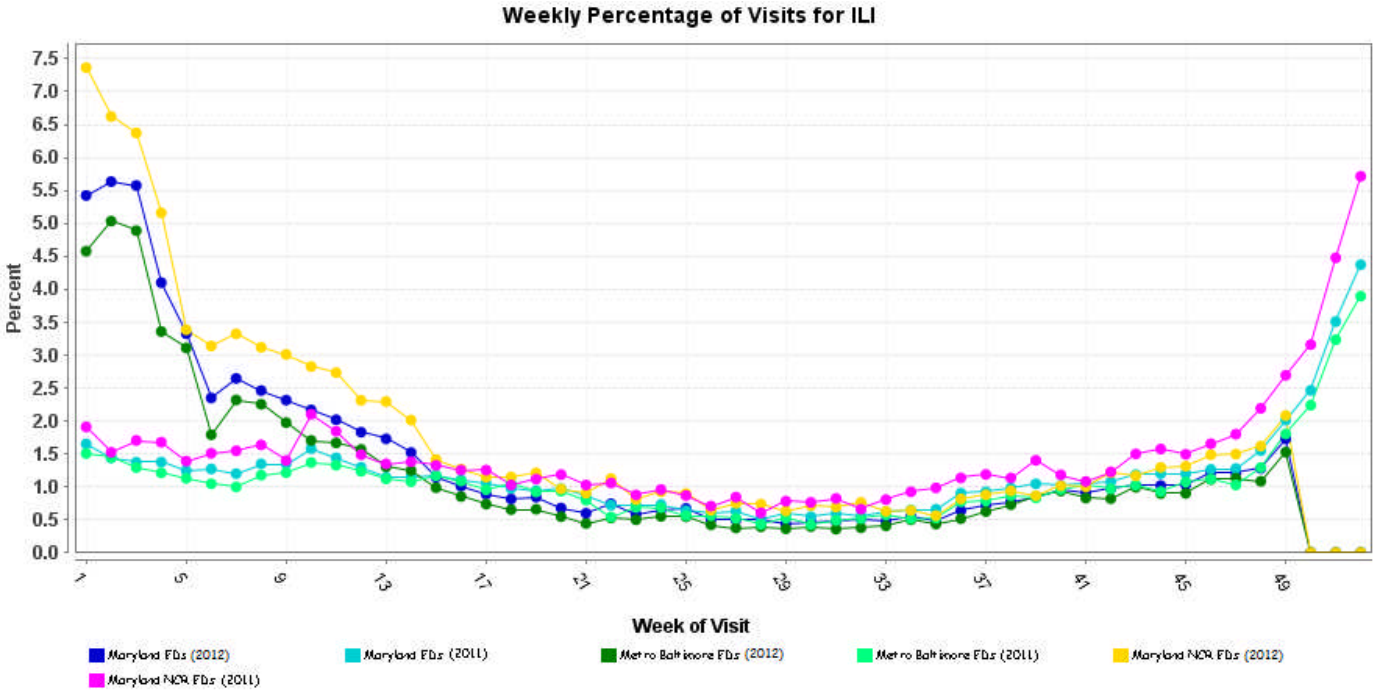
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 48 was: Local Spread with Minimal Intensity

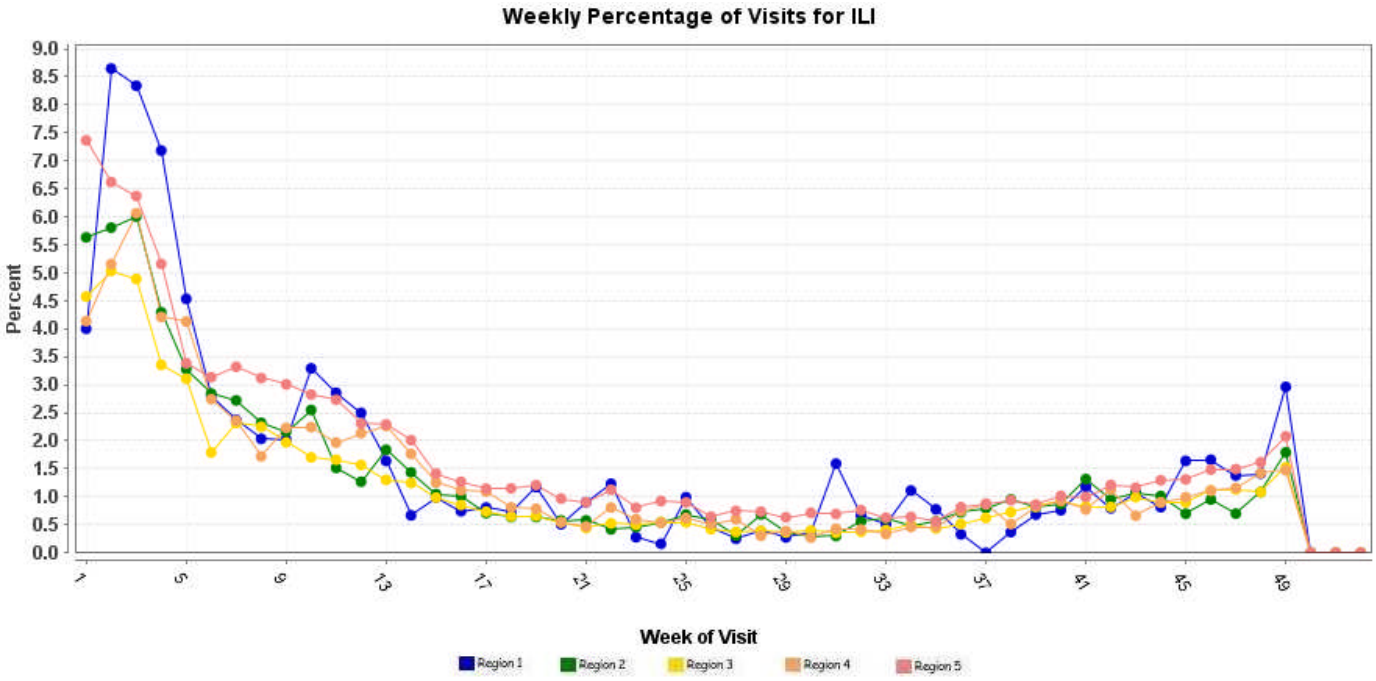
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



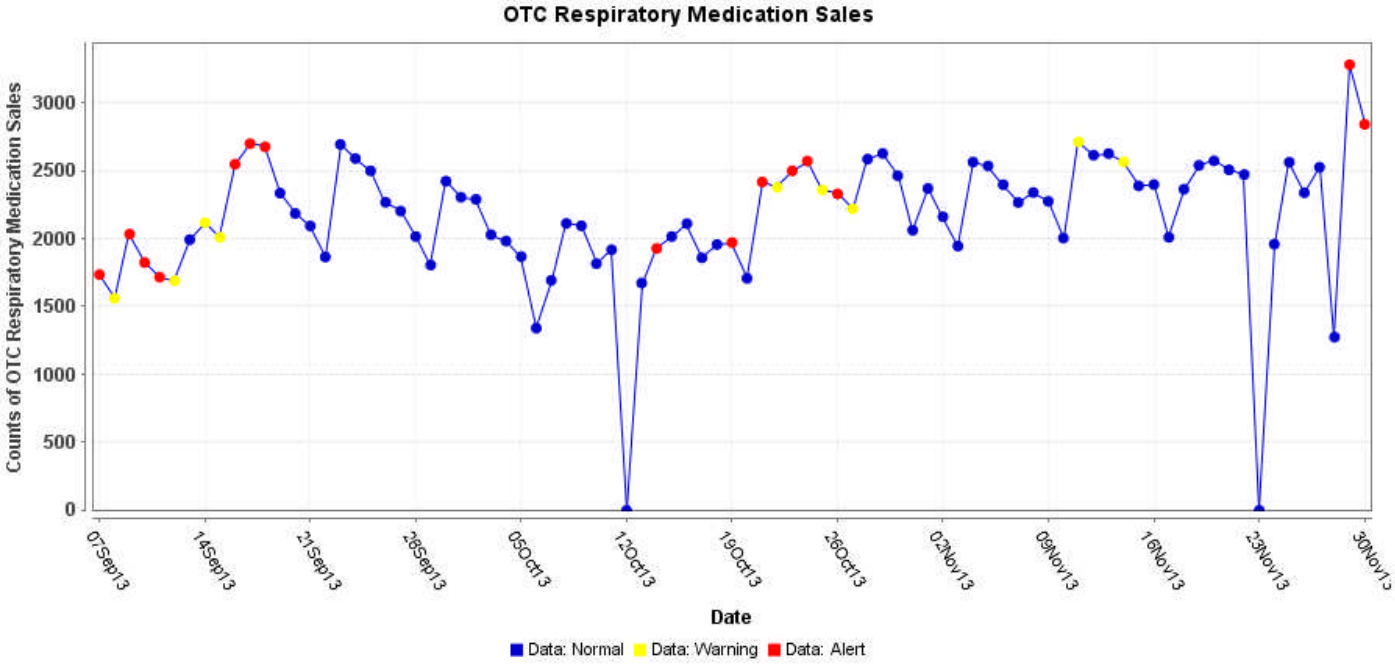
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of October 8, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 641, of which 380 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (H7N9): A new human H7N9 bird flu case was reported in east China's Zhejiang Province, the 5th in China this autumn, according to local health authorities on Thursday [28 Nov 2013]. The patient, a 78-year-old man from Anji County tested positive for avian H7N9 influenza virus infection on Wednesday [27 Nov 2013] when he went to the First Affiliated Hospital of College of Medicine, Zhejiang University, for treatment for a fever, said the Zhejiang Provincial Health Department. He then suffered respiratory failure and shock and is still in critical condition, said the hospital. This is the 3rd case reported in November [2013], following the one confirmed on 4 Nov 2013 in Zhejiang and one on 5 Nov 2013 in southern Guangdong Province. In October, 2 new human H7N9 avian flu cases were reported. No new cases were reported in September. China had reported 134 cases by the end of August [2013], with 45 fatalities, according to the National Health and Family Planning Commission.

NATIONAL DISEASE REPORTS*

E. COLI EHEC (ARIZONA) 26 November 2013, Lettuce was the likely cause of an *E. coli O157* outbreak that sickened 94 people eating at a southwest Valley Federico's Mexican Food restaurant, according to a report released this week by the Maricopa County [Arizona] Department of Public Health. The outbreak occurred between 18 and 31 Jul 2013 at the Federico's, on W. Camelback Road near Litchfield Park. According to the report, the specific source of the bacterial exposure is uncertain, but lettuce is the most likely culprit. "The lettuce could have been contaminated in the field from manure, or (from) contaminated irrigation water, during processing, transport, handling, or through improper storage," the report states. "Improper lettuce washing and preparation at the restaurant may have contributed to the spread of disease. The restaurant corrected these processes and complied with all other recommendations and no new cases were identified, effectively ending the outbreak." Midwest Beef, the Phoenix-based supplier that provides meat and produce to the restaurant, also delivers food to other Federico's locations in Phoenix [Arizona], as well as to other eateries in the Valley, the report says. However, no confirmed cases of illness were recorded at other local restaurants. That could mean that the source of the *E. coli* exposure occurred at the restaurant from an ill food handler, although no employee illnesses were reported at the restaurant during July 2013, the report says. Narrowing to the exact cause is difficult. The report notes other possibilities could include cross-contamination from another contaminated food source at the restaurant, such as beef, or the restaurant could have received a small, highly contaminated batch of lettuce that did not go to any other facility. After the outbreak occurred, company officials disposed of products at that location and hired a hygienic-specialist company to clean the restaurant, one of 20 Valley Federico's. 2 children developed hemolytic uremic syndrome, a life-threatening complication from an *E. coli* infection that can cause kidney failure. Of the 94 people who got sick, 24 were children. Findings from the county Health Department study were shared with Federico's to guide future prevention efforts. Federico's implemented recommendations for lettuce handling and storage, as well as hand washing, to minimize the risk of *E. coli* contamination. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *non-suspect case

SALMONELLOSIS (OKLAHOMA): 26 November 2013, 7 Oklahoma prison inmates have been hospitalized over the past 3 weeks with symptoms of salmonellosis. Officials don't yet know how many inmates overall were sickened by the disease, Department of Corrections spokesman Jerry Massie said. He told The Oklahoman that 47 women at the Eddie Warrior Correctional Center in Taft reported symptoms, along with 37 inmates at the Jim E. Hamilton Correctional Center in Hodgen. Other inmates fell ill at Joseph Harp Correctional Center in Lexington and the Bill Johnson Correctional Center in Alva, he said. Massie said it's uncommon for so many inmates to become ill at different facilities. Officials haven't found a specific cause, but the state Health Department is investigating the source of the bacterium. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

CHOLERA, DIARRHEA AND DYSENTERY (AFRICA): 28 November 2013, About 55 inmates have been feared dead from the outbreak of cholera in the notorious prison locally known as "Jail Ogaden" in the regional capital of Jigjiga [Somali Region], and several others are in a severe condition following the outbreak of the disease. This also followed a report that in the last week [up to 28 Nov 2013], about 45 inmates have died in the cells after the guards forced them to drink from contaminated water Jerry cans. A visit to "Jail Ogaden" in the regional capital of Jigjiga revealed that about 55 people [died] over the weekend [week ending 24 Nov 2013] after stooling and vomiting consistently. "I saw their (inmates') corpses, about 55, lying among the prisoners, while others [were] vomiting and stooling continuously," said a relative visitor. The notorious prison in the regional capital of Jigjiga has the capacity of 400 inmates; however, currently it holds several thousand inmates, which is more than it should. This is not the 1st time that a cholera outbreak has happened in the notorious Jail Ogaden in the regional capital of Jigjiga. The Puppet Administration of Ogaden did not carry out an awareness campaign to the jails and environs on how best to sanitize environment in order to stop the spread of the disease in and around the "Jail Ogaden." (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

MERS-COV (ABU DHABI): 28 November 2013, 2 more cases of Middle East respiratory syndrome coronavirus, MERS-CoV, have been confirmed in Abu Dhabi. The 2 affected patients are a Jordanian husband and wife, state news agency Wam said. The 1st patient, a man, 38, was found to have MERS-CoV after being admitted to the ICU of a local hospital after complaining of respiratory symptoms. His wife, who is 8 months pregnant, was later diagnosed and is also being treated in the ICU. The Health Authority Abu Dhabi confirmed it is coordinating with the Ministry of Health and other authorities in the country to deal with the issue. According to an update from the World Health Organisation (WHO) on [22 Nov 2013], "of the 176 laboratory-confirmed and probable reported cases to date, 69 have died." "The MoH also confirmed that the situation does not call for concern and that it is being monitored closely to ensure the health and safety of everyone," said the Wam agency. (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable